

REMARKS/ARGUMENTS

Election/Restrictions

Examiner has stated that a restriction to one of the following inventions is required under 35 USC 121:

- I. Claims 1 – 44, 94 – 100, drawn to a remotely controlled spa, classified in Class 700, subclass 83.
- II. Claims 45 – 93, 101 – 121, 127 – 138, drawn to a spa controller buffers, classified in class 700, subclass 275.
- III. Claims 122 – 126, drawn to remote software upgrades, classified in class 379, subclass 219.

Applicant elects without traverse to prosecute the invention of group I, claims 1 – 44, 94 – 100.

Claim Rejections – 35 USC 112

Examiner has rejected Claims 19 and 20 under 35 USC 112, second paragraph. In response, Applicant has appropriately amended Claims 19 and 20.

Examiner has rejected Claim 31 under 35 USC 112, second paragraph. In response, Applicant has canceled Claim 31 and has added new Independent Claim 139 and dependent Claim 140.

Examiner has rejected Claims 94 – 100 under 35 USC 112, second paragraph. In response, Applicant has appropriately amended Claims 94 – 100.

Claim Rejections – 35 USC 102

Examiner has rejected Claims 1, 4 – 6, 11 – 13, 16 – 20, 23, 27, 28, 30 and 32 – 44 under 35 USC 102(b) as being anticipated by Bassett. Specifically, Examiner states that “... Bassett shows a remotely controlled and monitored spa comprising: ... a remote computer ..., wherein said remote computer is programmed to display a control page...”.

Elsewhere in the office action, Examiner states

The addition of the claim element regarding “control pages” can be very clearly found in Col 5, lines 24 – 41. Bassett clearly shows the use of a laptop computer which can be used as a scheduler, user interface, ... and a display service for all AIM modules. While not specifically mentioning the word “screen” as stated in the arguments, laptop computers inherently have screens, and Bassett clearly shows the control aspect of the computer.

In response, Applicant has further limited Claim 1 so that it now includes the limitation “wherein said remote computer is programmed to display a control page comprising information related to the control and status of said remotely controlled and monitored spa”.

While it may be true that at least some laptop computers inherently have screens, it certainly is not true that laptop computers inherently have a “control page comprising information related to the control and status of said remotely controlled and monitored spa”. It would be wrong to speculate based on the one-sentence, sketchy description of a laptop computer in Column 5 of Bassett, that Bassett’s laptop has such a control page. In fact, neither in Bassett nor in any other reference cited by Examiner is there significant discussion of a control page or its features. To function, Bassett’s laptop would not necessarily have to have a “control page comprising information related to the control and status of said remotely controlled and monitored spa”. Indeed, it is possible for Bassett’s laptop to have no control page at all. Therefore, Applicant requests Examiner provide a new reference showing the limitations of Claim 1 as presently amended, or allow Claim 1 and all its dependent Claims.

Claims 16 – 20

Regarding Claims 16 – 20, Examiner states that

a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art.

In response, Applicant has amended claims 16 – 19 so that they have structural limitations not shown in the cited references. Applicant has cancelled Claim 20.

Claims 32 – 44

Regarding Claims 32 – 44, Examiner states that

a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art.

In response, Applicant has cancelled Claims 32, 34 – 35, and 38 – 44. Applicant has also added new Independent Method Claims 141 – 145 that contain limitations not disclosed in the prior art references cited. Therefore these claims, and their dependent claims, should be allowable.

Claim Rejections – 35 USC 103

Examiner has rejected a variety of claims under 35 USC 103 as being unpatentable over Bennett in combination with other references. As amended, the rejected Claims should now be allowable for the reasons stated above.

Claims 8 – 10

Regarding Claims 8 – 10, Examiner states

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the removable modules and cavity of Williams in the spa control system of Bassett because they share the same problem of dampness and wet conditions. It would have been obvious to one looking to solve this problem to look in any art where large amounts of water are involved.

Applicant respectfully submits that the problem that Applicant solves by utilization of a “removably attached” interface signal converter is not the problem of “dampness and wet conditions”. Rather, Applicant’s “removably attached” interface signal converter is used by a service technician to troubleshoot and then repair a spa where the spa owner opted not to buy his own interface signal converted. This is clearly explained on page 9 under the heading “Service Technician”:

In another preferred embodiment, a service technician can utilize the present invention to more effectively troubleshoot and repair a spa. This preferred embodiment is described by reference to FIGS. 3A and 3B. In this preferred embodiment, the spa owner has purchased a spa with spa controller 53; however, he opted to not purchase signal converter 50. To help troubleshoot and repair the spa, a service technician can bring with him portable user computer 52 with IR transceiver 52A and signal converter 50. As shown in FIG. 3A, the service technician first inserts signal converter 50 into spa controller 53. In a preferred embodiment, interface signal converter 50 fits snugly into an easily accessible cavity in spa controller 53. Then, utilizing IR transceiver 52A with portable user computer 52, the service technician is able to download from spa controller 53 to portable user computer 52 data that includes a record of errors that may have occurred during the operational life of the spa, as shown in FIG. 3B. Portable user computer 52 is programmed to display this data in a format useful to the service technician. A preferred display is similar to the dealer display discussed above and shown in FIG. 8. By analysis of this data, the service technician will be able to more effectively determine the required solution to repair the spa. (emphasis added)

Furthermore, Applicant submits that the station modules described in Williams are not even remotely similar to Applicant's interface signal converter. For example, Williams' modules do not show an interface signal converter that

converts communication signals transferred from said remote computer via said communications link and directs the converted signals to said spa controller, and wherein said interface signal converter converts signals from said spa controller to be communicated to said remote computer via said communications link.

Instead, Williams' modules contain circuitry for opening and closing solenoids on irrigation valves (column 6, lines 28 – 30). Furthermore, William's specifically describes what he considers to be the advantages of his modules starting at line 38 of column 6:

The use of plug in, removable station modules 22 for serving as the connection to the irrigation stations allows controller 2 to have great versatility. If only a four station controller is needed, only two modules 22 need be used. Thus, the user can tailor controller 2 to control precisely only those numbers of stations that are required for a particular irrigation system. In addition, modules 22 are all conveniently located within, and protected by, housing 4 of controller 2. Thus, controller 2 is compact and not unduly bulky. The bottom of controller housing 4 includes various ports or openings 80 for routing wires to and from terminal area 16 for connection to terminal blocks 20 or station modules 22. See FIG. 4.

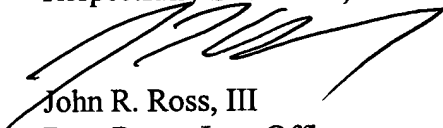
The Applicants have found that controller 2 will have great resistance to lightning strikes that may induce surge currents on the station wires. In previous controllers, the energy from such a strike will often be conducted back to controller 2 along the wires connecting controller 2 to the particular station affected by the strike. Since these wires are usually connected directly to a terminal strip that is hardwired to the main printed circuit board of controller 2, i.e. to the circuit board having the microprocessor controller, this energy could often damage many of the controller's components, including the microprocessor.

As is clearly seen, Williams' modules are dramatically different when compared to Applicant's interface signal converter. They serve an entirely different function and they were designed for an entirely different purpose. Williams is concerned with protecting a controller during "lightning strikes" and having a controller that is "compact and not unduly bulky". In contrast, Applicant is concerned with allowing a service technician to "troubleshoot and repair". Applicant submits that it is extremely unlikely that one of ordinary skill in the art would combine Williams with Bassett to achieve Applicant's invention. Therefore, Applicant respectfully requests that Examiner withdraw his rejection of Claims 8 – 10.

CONCLUSION

Thus, for all the reasons given above, this application, as the claims are presently limited, defines a novel, patentable, and truly valuable invention. Hence allowance of all outstanding claims of this application is respectfully submitted to be proper and is respectfully solicited.

Respectfully Submitted,



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